# SAFETY MESSAGE

## Personal Safety is our #1 priority



### Mosquitoes, Compiled by USDA-APHIS-CCEP

Only the female mosquitoes bite. They require a blood meal to acquire the protein needed to produce eggs.

The female inserts her needle-like proboscis—a slender, tubular, feeding and sucking organ—under the victim's skin, drawing blood into her abdomen. She will feed until her abdomen is full, unless discovered and brushed away.

#### **Bites**

The itching, swelling, and burning from a mosquito bite are actually caused by the body's autoimmune response to the saliva injected by the mosquito when she feeds. This saliva contains anti-coagulating agents that prevent the victim's blood from clotting as it is sucked into the mosquito's abdomen. A bite may take several days to heal and stop itching; treat it with Calamine lotion or a topical anti-itch medication.

#### How mosquitoes detect prey:

- They have chemical sensors that can sense carbon dioxide and lactic acid up to 100 feet away. Just about any mammal or bird gives off these gases as part of its normal breathing. Certain chemicals in sweat also seem to attract mosquitoes.
- Mosquitoes can detect heat, so warm-blooded mammals and birds are easily found once they get close enough.
- Mosquitoes have visual sensors that can easily see contrasts and movement.

#### Diseases mosquitoes carry:

- Encephalitis
- Malaria
- West Nile Virus

#### **Important precautions**

- Wear light-colored, long-sleeved shirts and pants.
- Use a mosquito repellent that contains **DEET** when outdoors.
- Stay inside! Avoid times of the day (early morning, dusk, and evening) that mosquitoes are most active.
- Help control the mosquito population by eliminating sources of standing water where they may breed.
- Limit outdoor activities at dawn, dusk, and early evening, when mosquitoes are most active.

#### **Products containing about**

- 24% DEET were effective for about 5 hours
- 20% DEET were effective for about 4 hours
- 6.5% DEET were effective for about 2 hours

Weigh the strength of DEET you use against the number of hours you will be exposed outdoors.

Remember that you can and should re-apply DEET if you extend your time outdoors.